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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,081	03/16/2001	Thomas Mossberg	5455P001	6284
8791	7590 12/31/2002			
BLAKELY SOKOLOFF TAYLOR & ZAFMAN			EXAMINER	
	IRE BOULEVARD, SEV ES, CA 90025	Thomas Mossberg	AMARI, ALESSANDRO V	
		•	ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 12/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)
	09/811,081	MOSSBERG, THOMAS
Office Action Summary	Examiner	Art Unit
·	Alessandro V. Amari	2872
The MAILING DATE of this communication Period for Reply	on appears on the cover sheet wi	th the correspondence address
A SHORTENED STATUTORY PERIOD FOR F THE MAILING DATE OF THIS COMMUNICAT  - Extensions of time may be available under the provisions of 37 of after SIX (6) MONTHS from the mailing date of this communicati  - If the period for reply specified above is less than thirty (30) days  - If NO period for reply is specified above, the maximum statutory  - Failure to reply within the set or extended period for reply will, by  - Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).  Status	ION.  CFR 1.136(a). In no event, however, may a recion.  s, a reply within the statutory minimum of thirt period will apply and will expire SIX (6) MON a statute, cause the application to become AB	eply be timely filed  y (30) days will be considered timely.  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).
1) Responsive to communication(s) filed or	n	
,	This action is non-final.	
3) Since this application is in condition for a closed in accordance with the practice under the closed in accordance with the closed in accordance with the closed in accordance with the closed in the closed in accordance with the closed in accordance with the closed in the closed in accordance with the closed in accordance w	- allowance except for formal mat	
4)⊠ Claim(s) <u>1-105</u> is/are pending in the app	lication.	
4a) Of the above claim(s) is/are with		
5) Claim(s) is/are allowed.		
6) Claim(s) is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) <u>1-105</u> are subject to restriction a <b>Application Papers</b>	and/or election requirement.	
9) ☐ The specification is objected to by the Exa	aminer.	
10) ☐ The drawing(s) filed on is/are: a) ☐	accepted or b) objected to by t	he Examiner.
Applicant may not request that any objection	n to the drawing(s) be held in abeya	ance. See 37 CFR 1.85(a).
11) The proposed drawing correction filed on	is: a)  approved b)  d	isapproved by the Examiner.
If approved, corrected drawings are required	d in reply to this Office action.	
12) ☐ The oath or declaration is objected to by the	he Examiner.	
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for for	oreign priority under 35 U.S.C. §	§ 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:		
1. Certified copies of the priority docu	ments have been received.	
2. Certified copies of the priority docu	ments have been received in A	pplication No
<ul> <li>3. Copies of the certified copies of the application from the Internation</li> <li>* See the attached detailed Office action for</li> </ul>	al Bureau (PCT Rule 17.2(a)).	_
14) ☐ Acknowledgment is made of a claim for do	·	
a)  The translation of the foreign languages 15) Acknowledgment is made of a claim for do	ge provisional application has be	een received.
Attachment(s)	, ,	
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-943)</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper N</li> </ol>	18) 5) Notice of I	Summary (PTO-413) Paper No(s) nformal Patent Application (PTO-152)

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## **DETAILED ACTION**

## Election/Restrictions

- 1. Applicant's election of species 2 of Group I in Paper No. 6 is acknowledged. However, upon further consideration, it is found that further restriction requirement is needed. Any inconvenience caused by this action is regretted.
- 2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - Claims 1-55 and 87-105 drawn to a volume hologram, classified in class
     359, subclass 29.
  - II. Claims 56-86, drawn to a method of making a hologram classified in class430, subclass 1, 2.

The inventions are distinct, each from the other because of the following reasons:

- 3. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product can be made by a materially different process such as electrically switchable holographic processes or Bragg angle holography.
- 4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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5. This application contains claims directed to the following patentably distinct species of the claimed invention:

If the Applicant elects I, then a species as identified below must be elected also. This application contains claims directed to the following patentably distinct species of the claimed invention:

Species 1 – volume hologram producing 2<sup>nd</sup> spatial wavefront and a 2<sup>nd</sup> optical spectrum – claims 1-11, 26-33, 36-44

Species 2 – volume hologram producing 2<sup>nd</sup> spatial wavefront and a 2<sup>nd</sup> temporal waveform – claims 12-25, 34, 35, 45-55

Species 3 – apparatus comprising a feedback structure - claims 87-103

Species 4 – a volume hologram configured to map 1<sup>st</sup> spatial wavefront into 2<sup>nd</sup> spatial wavefront and to map 1<sup>st</sup> optical spectrum into 2<sup>nd</sup> optical spectrum – claims 104-105

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

If the Applicant elects II, then a species as identified below must be elected also. This application contains claims directed to the following patentably distinct species of the claimed invention:

Species 1 – superposition of temporal interference patterns – 56, 57

Species 2 - depositing and imprinting a hologram on the layer - claims 58-81

Species 3 – selectively exposing a photosensitive substrate- claims 82-86

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Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

6. A telephone call was made to Kerry Tweet on 30 December 2002 to request an oral election to the above restriction requirement, but did not result in an election being made.

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Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alessandro V. Amari whose telephone number is (703) 306-0533. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on (703) 308-1687. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

ava (1 1/4 December 30, 2002

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